

Claim 1 relates to a guided wave radar transmitter. A probe defines a transmission line and it includes a target marker above an expected sensing region of the probe. The target marker has a smaller impedance change on the transmission line, than impedance change on the transmission line of a material being sensed.

A guide wave radar transmitter propagates a pulse down a transmission line. The pulses are reflected by a discontinuity caused by a change in impedance. The change in impedance can be caused by a transition between two media. For level measurement, this transition is typically where the air and the material to be measured meet. Alternatively, the transmission could be two different liquids. The larger the difference in dielectric constant, the larger the reflected signal. As such, the action is correct that an impedance change occurs at a boundary between regions of different material composition. The action is incorrect when it states that there is no such thing as an impedance change with a single material. In the illustrated embodiment of the invention, as described at page 16, lines 8-12, a reduced annulus on the probe provides a relatively small impedance change along the transmission line. The small impedance change produces a relatively low level signal. Particularly, while impedance changes do occur at a transition between different materials, impedance changes also occur owing to a change in configuration of the transmission line. The illustrated reduced annulus is one example. Other examples could be an increased annulus such as provided by a notch in the probe. Thus, with a transmission line, an impedance change is provided with a single material by changing, for example, the configuration of the transmission line.

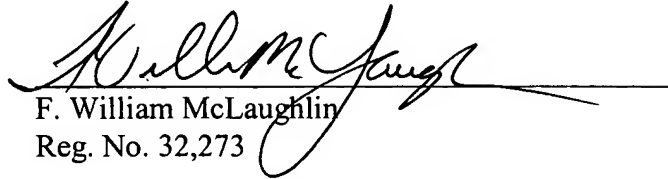
As such, applicants submit that claim 1 is not indefinite and the rejection ought be withdrawn.

Independent claims 9 and 18 are likewise not indefinite.

Reconsideration of the application and allowance and passage to issue are requested.

Respectfully submitted,

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